

## IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-63. (Canceled)

64. (New) A method of profiling a Web user, comprising:

capturing, at an Internet Service Provider (ISP) point of presence (POP), packets associated with Web page requests anonymously;

extracting, at the ISP POP, an IP address associated with the Web page request and a Uniform Resource Locator (URL) of the requested Web page;

associating each extracted URL with a client making the Web page request;

determining a user ID associated with each IP address of a client requesting a Web page;

for each client, storing the URL and the user ID of the client associated with the extracted URL;

developing a user profile for user IDs, at the ISP POP, based on the extracted URLs associated with Web pages requested by clients having the user IDs; and

cross referencing Web site profiles with the extracted URLs associated with Web pages requested by a client having the user ID to generate an updated user profile, at the ISP POP, based on inferred user demographics of the Web sites requested by the client having the user ID.

65. (New) The method of Claim 64 wherein the profile of the user contains data selected from demographic data.

66. (New) The method of Claim 65 wherein said demographic data is selected from the group consisting of user's age, user's gender, user's income and user's highest attained education level.

67. (New) The method of Claim 64 wherein the profile of the user contains psychographic data.

68. (New) The method of Claim 67 wherein said psychographic data includes data on the user's interests.

69. (New) The method of Claim 64, further comprising providing a database associating each of said plurality of Web sites with demographic characteristics of known persons who have accessed said sites.

70. (New) The method of Claim 69 wherein said database is provided by a Web site ratings service.

71. (New) The method of Claim 64 wherein the user profile comprises an update combined with an existing user profile.

72. (New) The method of Claim 71 wherein the generating a user profile comprises combining the profiles of the Web sites requested by a client having the user ID to the existing user profile using an averaging algorithm.

73. (New) The method of Claim 72 wherein said user profile includes data on a plurality of demographic categories, each associated with a rating, and the method further comprises filling in a value for the rating for any demographic category having a low confidence measure.

74. (New) The method of Claim 73 wherein filling in a value comprises using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure.

75. (New) The method of Claim 74 wherein said average rating is determined using a clustering algorithm.

76. (New) The method of Claim 64 further comprising erasing records of which Web sites said user has visited after developing the user's profile to protect user privacy.

77. (New) The method of Claim 64 further comprising delivering selective advertising to the client having the user ID based on the user profile associated with the user ID.

78. (New) The method of Claim 77 wherein delivering selective advertising comprises transmitting a pop-up advertisement to a display of a computer associated with a client having the user ID.

79. (New) The method of Claim 64, wherein the developing a user profile for user IDs further comprises generating, for a user associated a user ID, a user profile having a rating for categories of Web sites of interest to the user and a confidence measure representing an estimate of accuracy of a category's rating.

80. (New) A computer for profiling a Web user, comprising:  
  
a memory for storing a program;  
  
a processor operative with the program to capture, from an Internet Service Provider (ISP) point of presence (POP), packets associated with Web page requests anonymously, to extract, at the ISP POP, an IP address associated with the Web page request and an Uniform Resource Locator (URL) of the requested Web page, to associate each extracted URL with a client making the Web page request, to determine a user ID associated with each IP address of a client requesting a Web page, to store, for each client, the URL and the user ID of the client associated with the extracted URL, to develop a user profile for user IDs, at the ISP POP, based on the extracted URLs associated with Web pages requested by clients having the user IDs and to cross reference, at the ISP POP, Web site profiles with the extracted URLs associated with Web pages requested by a client having the user ID to generate an updated user profile based on inferred user demographics of the Web sites requested by the client having the user ID.

81. (New) The computer of Claim 80 wherein the profile of the user contains data selected from demographic data.

82. (New) The computer of Claim 81 wherein the demographic data is selected from the group consisting of user's age, user's gender, user's income and user's highest attained education level.

83. (New) The computer of Claim 80 wherein the profile of the user contains psychographic data.

84. (New) The computer of Claim 83 wherein said psychographic data includes data on the user's interests.

85. (New) The computer of Claim 90, further comprising a database associating each of said plurality of Web sites with demographic characteristics of known persons who have accessed said sites.

86. (New) The computer of Claim 85 wherein said database is provided by a Web site ratings service.

87. (New) The computer of Claim 80 wherein the user profile of the client having the user ID comprises an existing user profile.

88. (New) The computer of Claim 87 wherein the processor generates a user profile by combining the profiles of the Web sites requested by a client having the user ID to the existing user profile using an averaging algorithm.

89. (New) The computer of Claim 88 wherein said user profile includes data on a plurality of demographic categories, each associated with a rating, and the processor fills in a value for the rating for any demographic category having a low confidence measure.

90. (New) The computer of Claim 89 wherein the processor fills in a value by using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure.

91. (New) The computer of Claim 90 wherein said average rating is determined using a clustering algorithm.

92. (New) The computer of Claim 80 wherein the processor erases records of which Web sites said user has visited after developing the user's profile to protect user privacy.

93. (New) The computer of Claim 80 wherein the processor delivers selective advertising to the client having the user ID based on the user profile associated with the user ID.

94. (New) The computer of Claim 93 wherein the processor delivers selective advertising by transmitting a pop-up advertisement to a display of a computer associated with a client having the user ID.

95. (New) A system for profiling a Web user and delivering selective advertising to the user, comprising:

means for capturing, at an Internet Service Provider (ISP) point of presence (POP), packets associated with Web page requests anonymously;

means for extracting, at the ISP POP, an IP address associated with the Web page request and a Uniform Resource Locator (URL) of the requested Web page;

means for associating each extracted URL with a client making the Web page request;

means for determining a user ID associated with each IP address of a client requesting a Web page;

means for storing the URL and the user ID of the client associated with the extracted URL;

means for developing user profiles for user IDs, at the ISP POP, based on the extracted URLs associated with Web pages requested by clients having the user IDs; and

means for cross referencing, at the ISP POP, Web site profiles with the extracted URLs associated with Web pages requested by a client having the user ID to generate an updated user profile based on inferred user demographics of the Web sites requested by the client having the user ID.

96. (New) The system of Claim 95 wherein the profile of the user contains data selected from demographic data.

97. (New) The system of Claim 96 wherein said demographic data is selected from the group consisting of user's age, user's gender, user's income and user's highest attained education level.

98. (New) The system of Claim 95 wherein the profile of the user contains psychographic data.

99. (New) The system of Claim 98 wherein said psychographic data includes data on the user's interests.

100. (New) The system of Claim 95, further comprising means for providing a database associating each of said plurality of Web sites with demographic characteristics of known persons who have accessed said sites.

101. (New) The system of Claim 100 wherein said database is provided by a Web site ratings service.

102. (New) The system of Claim 95 wherein the means for generating a user profile comprises means for combining the profiles of the Web sites requested by a client having the user ID to the existing user profile using an averaging algorithm.

103. (New) The system of Claim 102 wherein said user profile includes data on a plurality of demographic categories, each associated with a rating, the system further



comprising means for filling in a value for the rating for any demographic category having a low confidence measure.

104. (New) The system of Claim 103 wherein the means for filling in a value comprises means for using an average rating of persons having similar profiles to that of said user for a category having a low confidence measure.

105. (New) The system of Claim 104 wherein said average rating is determined using a clustering algorithm.

106. (New) The system of Claim 95 further comprising means for erasing records of which Web sites said user has visited after developing the user's profile to protect user privacy.

107. (New) The system of Claim 95 further comprising means for delivering selective advertising to the client having the user ID based on the user profile associated with the user ID.

108. (New) The system of Claim 107 wherein the means for delivering selective advertising comprises means for transmitting a pop-up advertisement to a display of a computer associated with a client having the user ID.

109. (New) A computer readable medium comprising a program for profiling a Web user by performing the steps of:

capturing, at an Internet Service Provider (ISP) point of presence (POP), packets associated with Web page requests anonymously;

extracting, at the ISP POP, an IP address associated with the Web page request and a Uniform Resource Locator (URL) of the requested Web page;

associating each extracted URL with a client making the Web page request;

determining a user ID associated with each IP address of a client requesting a Web page;

for each client, storing the URL and the user ID of the client associated with the extracted URL;

developing user profiles for user IDs, at the ISP POP, based on the extracted URLs associated with Web pages requested by clients having the user IDs; and

cross referencing, at the ISP POP, Web site profiles with the extracted URLs associated with Web pages requested by a client having the user ID to generate an updated user profile based on inferred user demographics of the Web sites requested by the client having the user ID.